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MEAN WELL

SWITCHING POWER SUPPLY

ISO-9001 CERTIFIED MANUFACTURER

LPP-100 SERIES

Jameco Part Number 216688 (LPP-100-12)

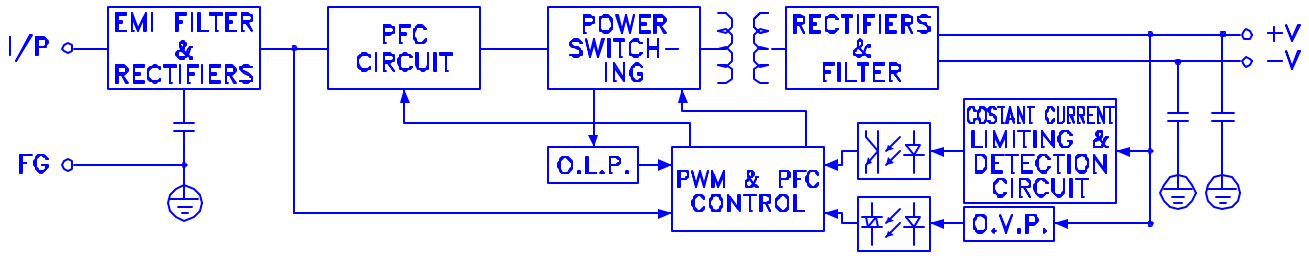
- .LOW COST, HIGH RELIABILITY
- .105◦C OUTPUT CAPACITOR
- .INTERNATIONAL AC INPUT RANGE
- .BUILT IN EMI FILTER, LOW RIPPLE NOISE
- . HIGH EFFICIENCY, LOW WORKING TEMPERATURE
- .SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
- .SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE PROTECTED
- .COMPACT SIZE, LIGHT WEIGHT
- .100% FULL LOAD BURN-IN TEST
- .BUILT IN PFC CIRCUIT
- .POWER FACTOR : 0.98 TYP.

MODEL / SPECIFICATION	LPP-100 -3.3	LPP-100 -5	LPP-100 -7.5	LPP-100 -12	LPP-100 -13.5	LPP-100 -15	LPP-100 -24	LPP-100 -27	LPP-100 -48
DC OUTPUT VOLTAGE	3.3V	5V	7.5V	12V	13.5V	15V	24V	27V	48V
OUTPUT V. TOLERANCE	±2%	±2%	±2%	±2%	±2%	±2%	±1%	±1%	±1%
OUTPUT RATED CURRENT	20A	20A	13.5A	8.5A	7.5A	6.7A	4.2A	3.8A	2.1A
OUTPUT CURRENT	0-20A	0-20A	0-13.5A	0-8.5A	0-7.5A	0-6.7A	0-4.2A	0-3.8A	0-2.1A
RIPPLE & NOISE	100mV	100mV	100mV	100mV	100mV	100mV	150mV	150mV	250mV
LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
LOAD REGULATION	±1%	±1%	±1%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
RATED OUTPUT POWER	66W	100W	101.25W	102W	101.25W	100.5W	100.8W	102.6W	100.8W
EFFICIENCY	69%	75%	76%	79%	79%	80%	83%	83%	83%
DC VOLTAGE ADJ.	CH1:+10,-5%								
INPUT VOLTAGE RANGE	85~264VAC 47~63Hz 120~370VDC								
AC CURRENT	1.7A/115V 0.75A/230V 3.3V: 1.2A/115V 0.6A/230V								
INRUSH CURRENT	COLD START 40A/230V								
LEAKAGE CURRENT	<2mA/240VAC								
OVERLOAD PROTECTION	105~150% TYPE:CONSTANT CURRENT LIMITING RESET:AUTO RECOVERY								
OVER VOLTAGE PROTECTION	115%~135% TYPE:SHUTDOWN RESET:RE POWER ON								
TEMP. COEFFICIENT	±0.05% / ◦C (0~50◦C)								
SETUP, RISE, HOLD UP TIME	600ms, 30ms, 20ms/230VAC; 1.2s, 30ms, 20ms/115VAC								
POWER FACTOR	PF>0.95/230VAC, PF>0.98/115VAC								
VIBRATION	10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES								
WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC								
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:500VDC / 100M Ohms								
WORKING TEMP., HUMIDITY	-10◦C~+60◦C(REFER TO OUTPUT DERATING CURVE), 20%~90% RH								
STORAGE TEMP., HUMIDITY	-20◦C~+85◦C, 10%~95% RH								
DIMENSION	222*62*35mm (L*W*H) PCB ONLY								
WEIGHT	370gs								
SAFETY STANDARDS	MEET UL1950, TUV EN60950								
EMC STANDARDS	MEET EN55022 CLASS B, EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61000-3-2,-3								

NOTE :
1. ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25º C AMBIENT.
2. TOLERANCE GINCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.
3. RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
4. LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.

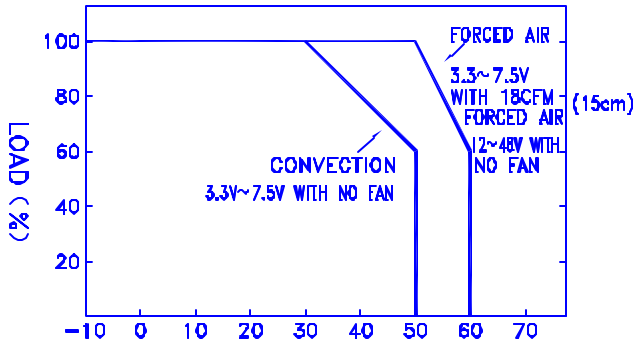
2001-01-17

BLOCK DIAGRAM

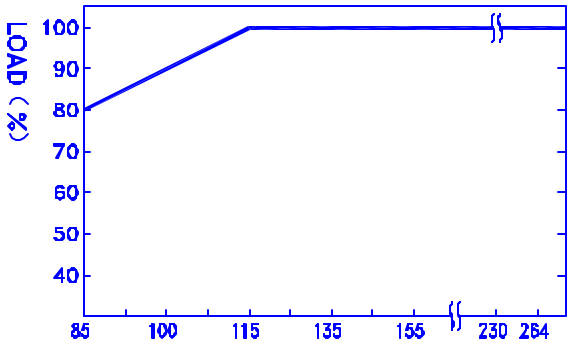


PFC fosc: 67KHz
PWM fosc: 134KHz

OUTPUT DERATING VS Ta



OUTPUT DERATING VS INPUT VOLTAGE



DIMENSION (mm)

☒ TERMINAL PIN NO. ASSIGNMENT

☒ CN1 : JST B5P-VH
PIN 1,3,5 : AC INPUT

☒ CN2 : JST B8P-VH
PIN 1,2,3,4 : DC OUTPUT -V
PIN 5,6,7,8 : DC OUTPUT +V

☒ MATING CONNECTORS

☒ CN1,2 MATING CONNECTOR TYPE
JST VHR SERIES OR EQUIVALENT WITH
JST SVH-21T-1.1 OR EQUIVALENT
CRIMP TERMINALS.